

UNITED STATES NAVAL POSTGRADUATE SCHOOL



THESIS

A PROPOSED MEASURE OF EFFECTIVENESS
FOR COUNTERINSURGENCY OPERATIONS

by

Raymond Lee Simonsen

June 1967

A PROPOSED MEASURE OF EFFECTIVENESS
FOR COUNTERINSURGENCY OPERATIONS

by

Raymond Lee Simonsen
Major, United States Marine Corps
B.A., Western Michigan University, 1963

Submitted in partial fulfillment of the
requirements for the degree of
MASTER OF SCIENCE IN OPERATIONS RESEARCH
from the
NAVAL POSTGRADUATE SCHOOL
June 1967

ABSTRACT

This thesis outlines the steps an insurgency normally takes and describes the present strategy used to combat the insurgency in South Vietnam as well as the measures of effectiveness currently being used in that country. The need for a measure of effectiveness relating directly to the people of the country engaged in counterinsurgency operations is established and methodology for an allegiance measure, based on current, well-documented psychological testing techniques is proposed.

ERRATA SHEET

1. Page 11, lines 9 & 10: "de-ception" vice "de-deption".
2. Page 15, lines 3 & 4: "formed" cannot be hyphenated "for-med".
3. Page 16, lines 5 & 6: hyphenate "geo-graphical" vice "geogra-phical".
4. Page 18, lines 4 & 5: hyphenate "in-volved" vice "invol-ved".
5. Page 19, lines 5 & 6 from bottom: hyphenate "stat-ed" vice "sta-ted".
6. Page 22, lines 12 & 13: hyphenate "polit-ical" vice "poli-tical".
7. Page 23, line 1: "offers" vice "offer".
8. Page 23, lines 19 & 20: hyphenate "civil-ians" vice "civi-lians".
9. Page 24, lines 18 & 19: hyphenate and correct "insur-gents" vice "unsur-gents".
10. Page 25, line 9: "food" vice "feed".
11. Page 47, lines 18 & 19: hyphenate "possibil-ity" vice "possibi-lity".
12. Page 49, lines 8 & 9: "mid-point" vice "mis-point".
13. Page 49, line 2 from bottom: hyphenate "de-scribed" vice "des-cribed".
14. Page 51, lines 3 & 4: hyphenate "famil-iar" vice "fami-liar".
15. Page 54, lines 13 & 14: hyphenate "qual-ity" vice "qua-lity".
16. Page 54, line 2 from bottom: hyphenate "endur-ance" vice "endu-rance".
17. Page 57, lines 16 & 17: hyphenate "impor-tance" vice "import-ance".
18. Page 59, lines 13 & 14: hyphenate "possibil-ity" vice "possibi-lity".
19. Page 62, line 1: "possible" vice "possbile".
20. Page 62, lines 5 & 6: "famil-iar" vice "fami-liar".
21. Page 62, bottom line: "semi-annual" vice "semi-annually".

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	9
Strategy for Counterinsurgency	9
Measures of Effectiveness	10
Definitions	10
Organizations of this Thesis	12
II. EVOLUTION OF AN INSURGENCY	13
The Four Phase Concept of Insurgency	14
Phase I	14
Phase II	15
Phase III	15
Phase IV	16
An Objection to the Four Phase Concept of Insurgency	17
III. COUNTERINSURGENT STRATEGIES	19
Military Defeat of the Insurgent	19
The need for Reform	22
Present Strategy in South Vietnam	22
IV. PRESENT MEASURES OF EFFECTIVENESS	26
The Marine Corps Method	26
The Military Advisory Command, Vietnam, Method	27
V. USING PSYCHOLOGICAL TESTING METHODS TO DEVELOP A MEASURE OF EFFECTIVENESS	31
Introduction to Psychological Testing Methods	31
Four Methods of Constructing Attitude Scales	34
The Method of Paired Comparisons	35
The Method of Summated Ratings	38

The Method of Equal-Appearing Intervals	41
The Method of Successive Intervals	43
Attitude Scales and Counterinsurgency Operations	50
VI. INDICATORS OF POPULAR SUPPORT	52
Allegiance	52
Indicators to be Measured	53
Political Control	53
Control of Intelligence	54
Public Opinion and Propaganda	55
Political Aspects of Education	55
Control of the Legal System	56
Community Services and Civic Action	57
Control of Transportation and Communications	58
Control of Recruitment	58
Economic Controls	58
Administration of the Questionnaire	59
VII. CONCLUSIONS AND RECOMMENDATIONS	61
BIBLIOGRAPHY	63
APPENDIX A.	
Marine Corps Pacification Progress Worksheet and Instructions	64
APPENDIX B.	
Military Advisory Command, Vietnam, Hamlet Evaluation System Worksheet	70
APPENDIX C.	
Thirty Sample Questions	82

LIST OF TABLES

TABLE		PAGE
I.	The Frequency and Proportion of Subjects Falling into Each of Five Categories and the Corresponding Normal Deviates	39
II.	Frequencies, Cumulative Frequencies, and Cumulative Proportions for Each Statement in an Arrangement of Interval Width Data	44
III.	Normal Deviates z_{ij} Corresponding to the Upper Limits of the Successive Intervals for the Cumulative Proportions (cp) of Table II	45
IV.	Estimates of Interval Widths w_{ij} Obtained from the Difference between the Upper Limits of the Intervals as Shown in Table III	46
V.	Proportions Falling below the Midpoint and Upper Limit of the First Interval and Normal Deviates Corresponding to the Proportions for Seven Statements	48

LIST OF FIGURES

FIGURE	PAGE
I. A Frequency Distribution Representing the Distribution of Attitude of a Specified Group on the Subject of the Level of Belief in Prohibition	33

I. INTRODUCTION

It is an axiom of any type of analysis that in order for an analyst to be able to measure the degree of success an organization may enjoy, he must know the nature of the organization's chosen objective in rather precise terms. This is also true and is sometimes more of a problem to an analyst in a counterinsurgency environment. It is sometimes helpful if the analyst in any environment knows what the organization's overall strategy is and what the strategies and objectives of the antagonists are. This paper will discuss the strategies and objectives of an insurgent as well as counterinsurgent strategies and objectives, and will describe an attempt to formulate or develop a measure of effectiveness for counterinsurgency operations.

Strategy for Counterinsurgency

One counterinsurgent strategy emphasizes destroying the enemy's battle forces. This is basically the same strategy employed during World Wars I and II and Korea and, on the surface, does not appear to be an unreasonable one. In the current conflict with the Viet Cong, such a defeat might take more time, men, and money; but there should be little doubt that the military prowess of the United States could eventually bring about such a defeat.

A better understanding of the organization and modus operandi of the Viet Cong in particular and the insurgents in general suggests that the military defeat of an insurgent force is not likely to bring lasting peace. The insurgent has his base in the people of the country and it is in the people that an insurgency is won or lost. The complicity of

the people is necessary for an insurgent victory and without their support, the insurgent is forced to either turn from guerrilla warfare to conventional warfare (where he may lack sufficient resources to achieve victory), or to abandon his effort altogether. Because the insurgent has to win the loyalties of the people in order to effect a victory, it becomes an important task of the counterinsurgent to re-win these same loyalties and to force the insurgent away from the people. Thus a primary objective of the counterinsurgent becomes restoring or gaining the loyalty of the people.

Measures of Effectiveness

The important problem of measuring these loyalties or measuring changes in loyalty from pro-insurgent through neutrality to pro-counter-insurgent is difficult. U.S. Forces in Vietnam are currently using two different methods to attempt this measurement. These methods employ behavioral indicators of loyalty together with value judgments made by U.S. officers. This paper proposes a method of measuring attitudes and loyalties borrowed from psychological testing methods as a partial solution to the problem of developing a measure of effectiveness for counter-insurgent operations.

Definitions

Before proceeding, the following definitions are listed to preclude any confusion concerning the terms most often used when talking about insurgency and counterinsurgency operations.

The word guerrilla is of Spanish origin, literally meaning a "small war" and a guerrillero is any person waging such a small war. This use of guerrilla has largely been abandoned and it is now used to refer to the person engaged in the waging of a small, unconventional war.

Guerrilla warfare is the employment of guerrillas in one or more of three possible uses: (1) they may be used against a foreign invader, e.g., the Spanish irregulars and civilians who harassed Napoleon and his troops during his attempted expulsion of the English from Spain; (2) they may be a weapon of insurrection, e.g., Mao Tse-tung's conquest of China; (3) or they may be the agent of a foreign power, as some claim the Viet Cong in South Vietnam to be. Whatever the use of guerrillas might be,

"guerrilla warfare is characterized by maximum employment of deception, concealment, intelligence, and improvisation; by surprise attacks and quick withdrawals; above all, by the avoidance of open tests of strength with the enemy unless success is assured."
(12)

A guerrilla movement or insurgency, regardless of its motivation, may be defined as the overall effort to seize control of a society and may be further defined as

"a movement relying on the support of the people, fighting the government administering his (their) country for an ideal believed not otherwise attainable; and avoiding combat except under circumstances of his (their) own choosing." (12)

An insurgency has three, four, or more stages of growth and usually employs guerrilla warfare in but one of its stages. Each stage of growth has large variations in its time schedule and in its actual makeup, not only from country to country, but also from operational area to operational area within a given country.

Insurgents refers to the normally small group of dissidents who have caused the insurgency development, i.e., the brains behind the movement. Insurgent forces and counterinsurgent forces are sometimes used in place of the words guerrillas and counterguerrillas, respectively. The counterinsurgent is the incumbent government and/or intervening power trying to defeat the insurgency and depose the insurgents from

whatever power they have gained.

Organization of This Thesis

This thesis begins by discussing the essential characteristics of an insurgency and then examines possible strategies to combat an insurgency.

After discussing existing measures of effectiveness for counter-insurgency operations, we shall investigate an alternate approach utilizing psychological testing methods. Then we shall explore the possible content of questionnaires which use attitude scaling.

II. THE EVOLUTION OF AN INSURGENCY

An insurgency generally begins when a group of individuals (the insurgents) becomes dissatisfied with the existing government, for one or more of any number of possible reasons, and decides to attempt to gain control of the government and of the society of the country in general. Their organization, their operation, and their very existence will initially be of a clandestine nature, hidden from the government until they wish to make their presence known. Remaining in hiding, however, means that they will not be able to openly recruit others to their cause, buy weapons, nor do any of the myriad other things that must be done prior to waging open warfare or rebellion. In order to compensate for this deficiency and weakness, and to shield their covert activities from the government, they will attempt to enlist the aid of the populace and to dissociate it from the government. If they are able to gain physical control of the population and to obtain its active support, they may be well on the way to winning because

"...in the final analysis, the exercise of political power depends on the tacit or explicit agreement of the population or at worst, on its submissiveness." (5)

Insurgents require certain physical inputs from the populace for their guerrilla forces, such as recruits, information, shelter, and food, once the insurgency has reached the guerrilla warfare phase. Before the populace can be persuaded to supply these inputs, the insurgents must have some cause that will lure people voluntarily to their side of the conflict. This cause must be plausible enough to attract initial supporters who will be able to sway public opinion and bring ever-increasing

numbers of people into the insurgent camp. This cause will probably be the one that forced the dissident group to attempt the overthrow of the government in the first place, unless the dissidents are in reality agents of a foreign power or are trying to wrest control of the country for personal gain. Although in the latter cases the cause may be fictitious in the eyes of the insurgent leaders, it must nevertheless seem real and plausible to the people.

This cause may take many forms, such as one appealing to the intellectuals and the proletariat in an industrialized society, or to the peasant class in an agrarian society; or one of independence from a colonial power. The more closely this cause is allied to the religious, social, political, and personal aspirations of the society from which the insurgents seek support, the more support they will be able to muster.

The Four Phase Concept Of Insurgency

Once the insurgents have a plausible cause, an insurgency usually develops according to a well-documented pattern. The four phases of the development of an insurgency are summarized in the following paragraphs. (3)

Phase I - The recruitment of a small band of followers, consisting of active as well as passive (but sympathetic) supporters, and the formation of a political party are the initial steps to be taken. These loyal supporters create front groups and infiltrate existing social and political organizations. The party is organized with its base in the proletariat or, in the case of underdeveloped countries having a small or nonexistent proletariat, in the peasant class. Once this has been accomplished, two strategies are generally available; (1) power seizure through legal election or appointment; (2) power seizure through armed struggle if the first alternative fails (as it usually does) or at least

a nationwide basis.

Phase II - This phase begins when the party leadership has decided that the time for armed insurrection is nearing. Underground cells are formed, communication and supply lines between them are established, and the weapons that will be needed are collected and stored. Agitators and sympathetic news media spread anti-government propaganda, and mobs and riots discredit the government, showing sympathetic but passive followers of the insurgent movement that resistance to the government is possible. Persuasion, threats, and violence are used to subvert police and government officials and to gain control of towns and villages. Intelligence nets are formed, small armed groups come into being and control of the villages is consolidated.

Phase III - This phase is the guerrilla warfare phase, the armed insurrection by which an ultimately successful insurgent will gain military and political control of 80 to 95% of the land mass of the country. Large military units are trained and equipped, large numbers of weapons are procured, and regular bases are acquired and established for use by the larger, more conventional military units of Phase IV.

Because the insurgent military forces are initially much weaker than those of the counterinsurgent, a direct confrontation between the two would almost certainly result in the annihilation of the insurgent. Thus, the insurgent leaders may select as the first operating areas for the guerrilla bands those regions or districts of the country where:

- (1) The strength of the insurgent's organization among the population has been ensured by the preliminary work of the party.
- (2) The center of the counterinsurgent power is far removed.
- (3) The terrain and poor government communications continue to make them inaccessible.

- (4) Both sides of administrative borders are contained within them, making it difficult for the enemy to coordinate his reaction.

As insurgent strength increases, the movement will expand into areas where its initial strength was small and thus enlarge the geographical area of control. (5)

The objective and summarization of Phase III of an insurgency may be summarized by the following quote from Galula.

"What makes it possible for the guerrilla to survive and expand? The complicity of the population. This is the key to guerrilla warfare, indeed to the insurgency. The complicity of the population is not to be confused with the sympathy of the population; the former is active, the latter inactive, and the popularity of the insurgent's cause is insufficient by itself to transform sympathy into complicity. The participation of the population in the conflict is obtained, above all, by a political organization (the party) living among the population, backed by force (the guerrilla gangs), which eliminates the open enemies, intimidates the potential ones, and relies on those among the population who actively support the insurgents..." (5)

The guerrilla operations will be planned primarily to obtain support from the population and secondly to disrupt the counterinsurgents' operations. An ambush against a counterinsurgent patrol should be a military success, but more importantly, it should bring the support of a village or implicate the people of that village against the counterinsurgent. In other words, attrition of the enemy is a by-product of guerrilla warfare, not its essential goal. (5)

Phase IV - This phase is marked by the creation of large regular military units, capable of defeating the counterinsurgent forces in large-scale conventional warfare. If he has good military assets, solid political structuring, popular mobilization in the areas of his control, good operational subversive activities by his underground agents in the counterinsurgent's areas, and psychological superiority; the scope and scale of the insurgent's operations will increase rapidly. A series of

offensives will be aimed at the complete destruction of the counterinsurgent. (5)

An Objection To The Four Phase Concept of Insurgencies

Valeriano and Bohannon refer to this four phase concept of an insurgency as the Sino-Vietnamese concept and they warn against its use as an analytical tool by the counterinsurgent in each and every case of insurgency. Their contention is that the concept of operations as outlined here is the doctrine of Chinese and Vietnamese Communist leaders and that it is not the established or traditional guerrilla practice.

"There is, however, a course for guerrilla warfare, an approach to successful revolution, that closely parallels the traditional guerrilla practice. In this, the guerrilla seeks to weaken counter guerrilla forces and the government they support by petty actions and petty harassments, inducing the government to waste its strength and lower the morale of its people by futile blows at the guerrilla, who is not there to receive them. Meanwhile, the guerrilla and his political leaders concentrate on building up popular support, organized and unorganized. At an opportune time, a quick blow, a quick "national revolution" spearheaded by the guerrilla force or, as in Russia, by political leaders, can capture or seduce the key officials of government, leaving the armed forces leaderless and the instrumentalities of government open to guerrilla control.

"Because of the wide dissemination of the Sino-Vietnamese concept, it appears especially important that the intention of the guerrilla forces be quickly and correctly recognized. It is critically important that counter guerrilla forces not be lulled by misconceptions, that an intended national revolution not be mistaken for the early stage of the Sino-Vietnamese pattern. If this mistake is made, a successful revolution can occur while counter guerrilla forces rest secure in the belief that an attempt at overthrow of the government is yet far away." (12)

It is probable that such a quick coup de main will be over too quickly for the incumbent government to be able to ask for a major power's intervention in their behalf. Or, if a major power is able to intervene in response to a request by the incumbent government, it is unlikely it will become involved in a protracted counterinsurgency because the insurgents will not have built up the organization and net-

work that the Sino-Vietnamese concept requires.

Therefore, our interests for the purposes of this paper will center on Phase III of the Sino-Vietnamese concept of insurgency, because it is in this phase that the United States seems most likely to become involved in an insurgency, as an intervening power.

III. COUNTERINSURGENT STRATEGIES

Military Defeat of The Insurgent

One strategy for counterinsurgents that enjoys some measure of popularity is the strategy of complete military defeat of the insurgent forces. The concept of total defeat of the opponent was employed in World Wars I and II, but to effect such a defeat of an insurgent in a country of any size would probably require more time, men, and money than either of those two conflicts and the results would not be as clear cut as were the victories for the Allies in 1918 and 1945. There should be little doubt that the military machine of a powerful nation could eventually bring about such a defeat. A strategy of pure military action would provide valuable propaganda ammunition for the insurgents, however, and it would also provoke considerable popular embitterment toward the government, due to the unexplained uprooting of villages and their normal way of life, not to mention the tragic but inevitable killing of civilians, possibly on a large scale. The use of military force alone does not resolve problems relating to the attitudes and loyalties of the people and the major role they play in an insurgency situation. The problem facing the counterinsurgent is not one of clearing an area of insurgent forces, but it is, in reality, one of persuading the people of the advantages of keeping their area clear and of thus invoking their help in the counterinsurgent effort. The problem has been clearly stated by Paret and Shy:

"It is erroneous to think that military defeat pure and simple will be the final solution. Unless the population has been weaned away from the guerrilla and his cause, unless reforms and re-education have attacked the psychological base of guerrilla action, unless

the political network backing him up has been destroyed, military defeat is only a pause and fighting can easily erupt again." (8)

Transitional societies appear to be the most liable to insurgent action. Within them, there are usually strong anti-government attitudes, traditionally viewing the government as an opponent rather than as a collaborator. It is not realistic to expect that these deeply ingrained attitudes will be changed significantly by five years or possibly even twenty-five years of work by a dedicated counterinsurgent. Actually, increased popular support and political loyalty for the government by changes in these attitudes is more likely to be a consequence than a cause of counterinsurgent success. The most that can be hoped for in the short run of counterinsurgent effort is an influencing of popular behavior and action so that attitudes and loyalties can be altered in the long run. If, after the insurgent is defeated and political unity is established, the government works very hard to establish a rapport with the people and is able to show the people progress toward filling their needs, the attitudes of the people may begin to change and real loyalty for the government begin to develop.

It has been suggested that a successful counterinsurgent strategy should include actions aimed at influencing the people toward more pro-government behavior as well as operations that will defeat the insurgents militarily. If the insurgents are defeated militarily but retain support of the citizenry, the hard core insurgents will revert to the clandestine cell type of operation that prevailed in Phases I and II and wait until a more favorable atmosphere for their operations occurs.

It is also essential that the counterinsurgent either negate the original insurgent cause or find some way to mollify the populace so that the cause loses its importance to them. There have been instances

in which counterinsurgents have been able to effectively adopt the insurgents' cause as their own, thereby eliminating or reducing this source of popular support for the insurgents. As an example, the insurgents' cause in Malaya was to achieve independence from British colonial rule. When the British promised the people independence at a specified time in return for cooperation with the government, however, the insurgents' raison d'etre lost its meaning and the insurgency was defeated. The war was long and costly in both money and men but the insurgents were destined to failure after they lost the cause they needed to rally the people.*

This is not to say, however, that the negation of the cause will, by and of itself, assure the victory of the counteinsurgent: it is a necessary but not sufficient requisite for victory. Once the insurgent infrastructure is organized and functioning, the existence of a cause loses much of its relative importance and the negation of it may make the conduct of insurgency operations more difficult, but not impossible. The people were cajoled to the side of the insurgent originally by means of a cause that was attractive to them and their complicity with the insurgent is maintained by their belief in that cause, if it still exists; or, out of a desire to maintain the status quo if there is no real benefit to be gained by switching allegiance to the government, or counterinsurgent. If the insurgent finds that the cause or the status quo is

*It must not be thought that the British actually lost a larger objective by their granting independence to Malaya. According to the signs of the times, independence would have been granted before too much more time had elapsed anyway, and because of their action, the British gained an ally for the West and the Communists lost a potential satellite.

not sufficient to maintain this complicity, however, he may resort to terrorism to maintain it.

The tactic of terrorism is much easier to combat than an ideal or a genuine grievance, because the people will more readily help fight against an insurgent who needs terror to maintain control than against one who is supposedly championing their grievances.

The Need for Reform

The existence of a cause is often indicative of a need for large-scale governmental reform and it is because the insurgents have promised to alleviate the hardships caused by this need that they have gained their initial popular support. Most of the transitional countries, by Western standards, do need some degree of social, economic, and/or political reform and such reform could be one of the goals of that country or an intervening power. Problems arising wherein the government of the transitional country may be unwilling or unable to effect the reform measures that are needed are very important. They are, however, also very complex and are beyond the scope of this paper and will not be treated here.

Present Strategy in South Vietnam

In the preceding chapters, we have established that although the military defeat of the insurgent is necessary, it must be coupled with a program of pacification and civic action that will help promote deeper pro-government attitudes among the villagers. For example, the strategy currently employed by U.S. forces in South Vietnam is capable of fulfilling the military and pacification tasks set for it. This strategy is aimed at separating the people from the Viet Cong insurgent and giving tangible evidence to these people that the Government of South Vietnam,

with the United States as their ally, offer a better way of life than do the Communists.

This strategy employs a three-pronged offensive, consisting of large-unit operations, small-unit or counter guerrilla operations, and the pacification programs. The large-unit operations are directed against the Viet Cong and North Vietnamese main force units and are meant to clear an area of large enemy units and keep them on the move, while the counter guerrilla, or small-unit operations are what eventually rout out the guerrillas, denying them access to the populace. The pacification programs follow in the wake of the combative efforts and provide protection against Viet Cong attacks, medical assistance, food, re-establishment of local government, and other forms of assistance. (7) Medical treatment and the feeding of villagers during military operations serves to minimize the resentment and ill feeling which would be generated by the inconvenience of village search, etc.

While humane treatment of the populace by the military is important, the Revolutionary Development Teams now working in parts of South Vietnam seem to be the best solution to date to the problem of implementing the pacification programs, however. These teams of trained Vietnamese civilians are probably much more acceptable to the people than teams composed of U.S. military personnel. The U.S. forces are alien to the country and to the people and will rarely be able to establish the rapport with the people that can be established by other Vietnamese. The military forces have other tasks to perform, equally as important as pacification, and are not trained to handle the detailed and comprehensive Revolutionary Development Program that is necessary. They will be forced to take the initiative in these programs until the area is secure enough to permit

the introduction of the Revolutionary Development Teams and/or until such teams are trained and available, but it should not become the primary task of the military forces for any lengthy period of time.

The current manner in which this three-pronged offensive is employed is of some interest and an analogy to the wave theory of radiation might prove useful. An initial base of operations is established by the counterinsurgents on the coast of the country in which the counterinsurgency is being fought, if possible, so that there are only three sides of the camp to be defended by the ground units and so that the problems of resupply are minimized. As soon as possible, the large-unit operations are begun, designed to keep the larger guerrilla units on the move and to force the guerrillas to abandon any bases he may have near the friendly base. The small-unit operations next begin to seek out and apprehend the village infiltrators and agents, confining their efforts to a rough semicircle with the base camp as a center. The initial pacification teams then move into the area and begin the pre-planned pacification and civic action programs. They remain in the area until such time as a Revolutionary Development Team is able to move into the area. As the insurgents are forced back from the base camp and the people begin to accept the government and U.S. forces, the semicircle of progress advances, much like a very large, slow-moving wave front.

The insurgent forces may attempt to move into the area behind the 'wave front' and re-establish their influence among the people. The manpower requirements necessary to leave defenders behind in every village to deter insurgent reappearances are beyond the realm of possibility for either the U.S. or the South Vietnamese regular forces. As the U.S. and South Vietnamese forces move through an area, civilians from the village

are trained, armed, and left to provide stop-gap defense against the Viet Cong. Communications are established with nearby units of U.S. or South Vietnamese regular forces which will respond whenever large units of Viet Cong are encountered by the civilian defenders.

This strategy obviously has more merit than the one whereby a large unit moves into an area, engages the enemy, and then departs from the area altogether. Large-unit hit-and-run tactics have merit in that they keep the enemy on the move and disrupt the establishment and maintenance of his bases, as well as confiscate his feed and arms reserves, but they have little permanent value as far as an ultimate victory over the insurgents is concerned because they have no permanent effect on the allegiance of the people.

This three-pronged strategy attempts to accomplish most of what has been deemed necessary for any strategy in an insurgency situation and it should not be too difficult for experienced leaders to evaluate or measure the success of the large and small unit efforts. Measuring the success of the pacification programs is much more difficult, since it involves measuring the attitudes of the people and their pro-government feelings, and the measurement of such intangibles is seldom easy. The next chapter discusses two current methods which attempt to measure the success of the pacification or Revolutionary Development programs.

IV. PRESENT MEASURES OF EFFECTIVENESS

The Marine Corps Method

The Marines, presently engaged in the fight against the Viet Cong in the northern provinces of South Vietnam, have used, for approximately one and a half years, a method which attempts to measure the success of their pacification programs in that area. This method is based on awarding points to villages for the completion or partial achievement of several pacification tasks. Villages are scored during completion of a worksheet (Appendix A) by a Civic Action Officer. These worksheets are submitted on a specific date each month to a higher command for evaluation and analysis.

The several tasks are grouped into five major categories of concern:

- (1) destruction of organized Viet Cong military forces,
- (2) destruction of Viet Cong infrastructure,
- (3) establishment of local security,
- (4) establishment of local governments,

and

- (5) completion of initial civic improvement programs.

A village may be awarded a maximum of twenty points for each of the five major categories and the total number of points awarded a village is taken to indicate the percentage of pacification achieved in that village.*

On maps of the tactical areas, the villages are plotted according to their computed percentages of pacification. The area, civilian

*The maximum total points = 100 = 100% pacified.

population, and the number of villages falling under each classification of per cent pacified are then listed in a chart below the map. Thus one is able to see, albeit roughly, how the pacification programs and military operations have affected the area and how successful or unsuccessful they have been from one month to the next.

The Military Advisory Command, Vietnam, Method

In January, 1967, the Military Advisory Command, Vietnam instituted a new method of measuring counterinsurgency progress in South Vietnam. The methodology is similar to the Marine method except that no single value is used to estimate the level of pacification of a hamlet. One of the most noteworthy accomplishments is the fact that this method of measuring the pacification or Revolutionary Development progress, as it is termed by the Advisory Command, represents the first time each and every hamlet in South Vietnam not under overt Viet Cong control has been measured on a regularly scheduled basis.

Each hamlet is visited monthly by the subsector advisor who appraises six factors per hamlet:

- (1) Viet Cong military activities,
- (2) Viet Cong political and subversive activities,
- (3) security (friendly capabilities),
- (4) administrative and political activities,
- (5) health, education, and welfare,

and

- (6) economic development.

The first three factors relate to hamlet security and the second three to Revolutionary Development. Thus, the Hamlet Evaluation System constitutes a two-pronged measure of effectiveness. Working in conjunction

with his Vietnamese counterpart, the advisor grades each hamlet in his subsector on the basis of a five category scale (E = worst and A = best) for each of three indicators per factor. To assist the advisor in rating the hamlets, detailed definitions of the eighteen indicators for each rating category are given in the instructions and partial definitions are contained on the Hamlet Evaluation Worksheet, a sample of which is presented in Appendix B. In addition to the eighteen indicators, there are eight problem areas on the worksheet that are to be evaluated by the advisor.

A Hamlet Evaluation Summary Form is submitted by the subsector advisor via the sector advisor and Province Team to the Revolutionary Development Support Directorate for machine processing and printing of data concerning that sector. The Directorate is also responsible for the final evaluation and derivation of alphabetical and numerical hamlet scores.

Although the advisor does not evaluate the eighteen indicators completely by himself, the evaluations are based on value judgments. Value judgments may be very good in accurately assessing a situation but they are liable to inconsistencies and personal biases over a period of time and especially between individuals, no matter how clear and precise the instructions.

The two-pronged measure of effectiveness used by the Advisory Command might be used to compare the measured security of an area and the measure of the Revolutionary Development to see if they are correlated. The Revolutionary Development measure is expected to be low if the security measure is low, but if the security measure were high and the Revolutionary Development measure were still low, further in-

vestigation of the techniques of measuring and/or the area and its people would probably be necessary. Similarly, if the states were reversed, with a high Revolutionary Development measure and a low security measure, it might be suspected that there were something wrong with either one or both of the measures or that for some reason the people in that area were highly motivated toward the side of the government, indicating that more effort in that community might yield larger benefits than usual.

The entries on the various worksheets of the Marine and the Advisory Command methods are more or less the value judgments of the Civic Action Officers or Advisors. The value judgments of an experienced and conscientious officer may give or reflect an accurate accounting of the situation. It is, however, quite possible that there is a limited number of experienced officers who will conscientiously perform a job that is oftentimes odious to an infantry officer. Studies have shown that even with something as objective as measuring a cylinder with a micrometer, a myriad of minute errors combine to produce some variation from measurement to measurement. If there are inconsistencies among objective measurements, it may be assumed that there will very probably be larger inconsistencies for measurements as subjective as those contained in the Marine and Advisory Command methods. It is therefore likely that there will be inconsistencies among the monthly reports of each officer as well as among reportings of different officers.

These methods have filled a definite need since their introduction in that they attempt to measure the success of U.S. and South Vietnamese attempts at pacification of the people of South Vietnam. It is felt that more accurate measures can be developed, however, using methods

based on psychological testing techniques. The following chapter discusses the possibility of adapting these psychological methods to a counterinsurgency measure of effectiveness.

V. USING PSYCHOLOGICAL TESTING METHODS TO DEVELOP A MEASURE OF EFFECTIVENESS

Introduction To Psychological Testing Methods

It appears that a method whereby the people of an insurgency wracked country are used to evaluate their own attitudes would be of value in developing a measure of effectiveness. It is felt that the key to an accurate measure lies with the people themselves who seem to be an obvious source for answers to the problem of measuring loyalty and allegiance.

This is not to say that direct questioning of the villagers about their loyalties would necessarily yield useful information. There is a possibility that the answers to such questions would be what the villager (if he understood the question to begin with) thought his interrogator wanted to hear rather than what he actually felt. In spite of this possible detriment, the use of the people to evaluate their own attitudes is worthy of our consideration.

In essence, what we want to do is to

"...devise a method whereby the distribution of attitude of a group on a specified issue may be represented in the form of a frequency distribution." (10)

The problem of measuring an intangible is that no unit of measurement is defined for the range of attitudes, from those most strongly opposed to the issue at one end of the scale to those as strongly in favor of it at the other end. The crux of the problem is the definition of this unit of measurement and four possible methods for its determination have been developed over the last few decades.

Definitively, attitude is used

"...to denote the sum total of a man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and convictions about any specified topic," (9)

while opinion is used to mean a verbal expression of an attitude. Because an opinion symbolizes an attitude, we shall use various opinions as the means for measuring attitude. Lest there be confusion later, the objective index is herein referred to as the statement or opinion while the inferred subjective inclination of the person being examined is called the attitude variable.

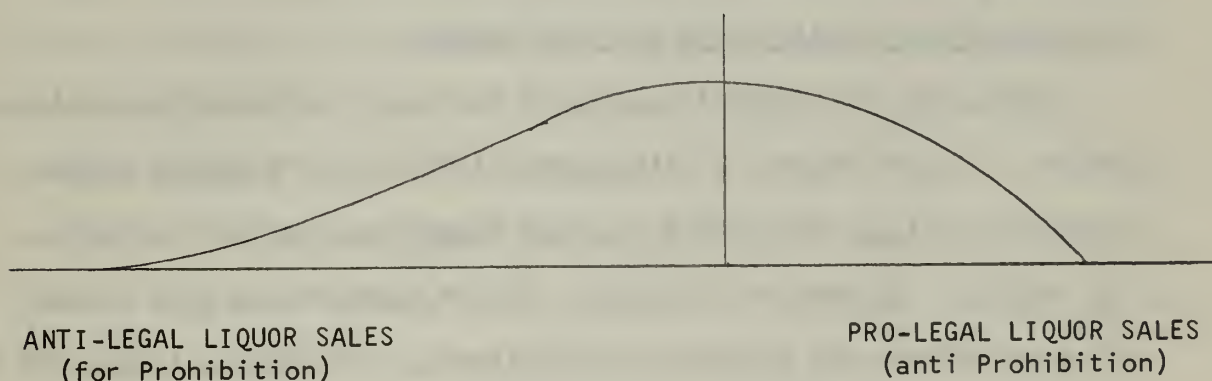
It is fairly obvious that some discrepancy exists between a person's opinions and overt acts, which we will use here as an index, and the true attitude which we infer from such an index. Every time we measure something however, we postulate an abstract continuum, such as height or weight, and the thing measured is referenced to that continuum through one or more indices. The actual values of what we are trying to measure are inferred from the relative consistency of the several indices, since we never know the values exactly. For example, a retail dealer attempts to measure public good will toward his establishment by several indices, such as the number of active and potential customers that enter his store. It is this same type of situation with which we are dealing when we attempt to measure attitude. Thus, this discrepancy between the indices of measurement and actuality is universal.

An example of the problem of the indices of measurement and the abstract continuum is given in the figure below, which represents an attitude variable, the level of belief in prohibition, including a zone of neutrality with regard to the attitudes toward alcoholic consumption. This attitude variable is not in fact an actual variable but is an hypo-

thetical construct, an intangible attribute that we assume to exist and attempt to measure. Attitudes may be considered variables because they generally vary from person to person. A person who is generally opposed to the consumption of alcohol would be represented somewhere to the left of the neutral zone while an imbiber would be represented somewhere to the right of the zone of neutrality. It is not difficult to conceive of a frequency distribution that would represent the distribution of attitude in a specified group of people, such as the inhabitants of a village.

Figure 1

A frequency distribution representing the distribution of attitude of a specified group on the subject of the level of belief in prohibition.



At any particular point on the base line of the frequency distribution, there is represented a certain attitude toward the issue, in this case, prohibition. We want to know how frequently this attitude occurs among the members of the group we are investigating and this is represented by the ordinate of the distribution at that point. Because of the imprecise nature of the measurement, discrete measurements rather than the continuous measurements represented on the diagram, are used.

Psychologists have attempted to use attitude scales to measure many intangible aspects of human behavior for some time. One of the critics of the personality tests that have been used extensively in American industry is Martin L. Gross. (6) In his book 'The Brain Watchers,' he is critical not so much of the scales and tests themselves as he is of the uses and unwarranted assumptions that are made by 'industrial psychologists' and others when they are using them. One of these untoward uses occurs in attempting to adapt several existing tests for use in areas where they were never intended to be used. It is felt that most of these criticisms would not be valid for an attitude scale that was designed to measure a single, well-defined issue and used only to measure attitude relating to that issue.

Four Methods of Constructing Attitude Scales

There are four generally accepted methods of constructing attitude scales: (1) the Method of Paired Comparisons; (2) the Method of Summated Ratings; (3) the Method of Equal-Appearing Intervals; and (4), the Method of Successive Intervals. In the construction of a scale, all four methods use the same initial steps. Individuals, singly and in groups, are asked to write down and submit a statement or opinion concerning the issue. In addition, a literature search is conducted to find suitable, brief statements about the issue. The entire set of statements and opinions is then edited to eliminate those that are irrelevant and those that do not relate directly to the issue. As an example of the latter, suppose someone had submitted the statement, 'The consumption of alcohol increases the desire for tobacco'. This may certainly be true, but it does not relate to his attitude toward prohibition and it should not be included in the finished scale. What should remain

after the editing is a rather extensive list of statements that is felt to cover the entire continuum of attitudes toward the issue, from a position of disagreement, through a neutral position, to a position of agreement. It is important to ensure that there are neutral statements included so that the scale will not break into two pieces. It is at this point that the four methods separate but the underlying tenet for all of them is that the measurement of attitude toward an issue by an individual is effected by the endorsement or rejection of these statements or opinions about that issue.

The Method of Paired Comparisons

This method attempts to define a frequency distribution by having a number of persons compare each possible pair of statements and decide which of the pair is most favorable toward the issue. The method assumes that there is associated with each statement a most frequently aroused response and that the responses to a given statement or stimulus are normally distributed about the mean, or most frequently aroused response. This mean is taken to be the scale value of the statement on the attitude continuum. Thus a response S_i to statement i is a normally distributed random variable with mean \bar{S}_i and standard deviation s_i , and \bar{S}_i represents the scale value for the statement.

Let

f_{ij} = the number of times statement i was judged more favorable than statement j ,

N = the number of judges,

$p_{ij} = f_{ij}/N$,

and

z_{ij} = the unit normal deviate expressing the value of p_{ij} .

If, in the judging, it was found that statement i was judged more

favorable than statement j , we would expect the scale value for statement i , \bar{S}_i , to be higher than the scale value for statement j , \bar{S}_j , where the continuum of scale values runs from least favorable to most favorable. In order to determine the interval on the continuum that separates the scale values of statements i and j , it will be necessary to examine the distribution of the difference between the two random variables, S_i and S_j . From basic statistics it is known that the difference between two normally-distributed random variables is also normally distributed with standard deviation

$$s_{i-j} = (s_i^2 + s_j^2 - 2r_{ij}s_is_j)^{1/2}, \quad (1)$$

where

s_{i-j} = the standard deviation of the differences, $S_i - S_j$,

s_i and s_j are standard deviations as previously defined,

and

r_{ij} = the correlation between S_i and S_j .

The scale separation between \bar{S}_i and \bar{S}_j can be expressed in terms of the above formula and the normal deviate z_{ij} , corresponding to the proportion of comparative judgments, p_{ij} , in the following way:

$$\bar{S}_i - \bar{S}_j = z_{ij}(s_i^2 + s_j^2 - 2r_{ij}s_is_j)^{1/2}. \quad (2)$$

If it is assumed that $s_i = s$, for all i , and $r_{ij} = r$ for all i and j , then

$$z_{ij} = (\bar{S}_i - \bar{S}_j)/(2s^2(1 - r))^{1/2}. \quad (3)$$

The denominator of the right hand side of equation (3) is a constant and is the common unit of measurement of the scale separations of the various pairs of statements. Without any loss of generality, this constant may

be set equal to 1.00 so that

$$z_{ij} = \bar{s}_i - \bar{s}_j. \quad (4)$$

If there are n statements, there are consequently

$$\binom{n}{2} = n! / 2! (n - 2)! = n(n-1)/2 \quad (5)$$

equations of the form of equation (4) and n unknowns, allowing or favoring a least squares solution to determine the scale separations. Next, a matrix is constructed as follows:

Statement	1	2	3 n	Sums	Means
1	z_{11}	z_{12}	$z_{13} \cdot \cdot \cdot z_{1n}$	$z_{1.}$	$\bar{z}_{1.}$
2	z_{21}	z_{22}	$z_{23} \cdot \cdot \cdot z_{2n}$	$z_{2.}$	$\bar{z}_{2.}$
:	:	:	:	:	:
n	z_{n1}	z_{n2}	$z_{n3} \cdot \cdot \cdot z_{nn}$	$z_{n.}$	$\bar{z}_{n.}$

The z_i 's are used for the actual scale values along the continuum of values. The origin may be re-established by adding the absolute value of the most negative $\bar{z}_{i.}$ to all the $\bar{z}_{i.}$'s, permitting non-negative scale values.

A problem arises with this method whenever an individual p_{ij} turns out to be equal to 1.00 or 0.00 because such a p_{ij} does not provide any estimate of the scale separation of \bar{s}_i and \bar{s}_j .

It is considered wise to ignore not only comparative judgments for which p_{ij} is 1.00 or 0.00 but also those for which p_{ij} is greater than or equal to .98 and less than or equal to .02. (4) This is so because the difference between the two z values is so much greater at the

extremes of a normal distribution than the same difference near the mean.

Ignoring all p_{ij} 's greater than or equal to .98 and less than or equal to .02 means that there will be 'holes' in the Z matrix. Now,

$$z_{ij} - z_{(i-1)j} = \bar{s}_i - \bar{s}_{(i-1)}. \quad (6)$$

For simplicity, let

$$D_{i(i-1)} = z_{ij} - z_{(i-1)j} = \bar{s}_i - \bar{s}_{(i-1)}. \quad (7)$$

Because the origin on the continuum is arbitrary, we set $\bar{s}_1 = 0$, so that $\bar{s}_2 = D_{21}$. It is then straightforward to solve for the remaining \bar{s}_i 's so that the scale values are relative to the origin.

Not only does this method require many computations, but the number of comparative judgments rises alarmingly as the number of statements increases. Thurstone and Chave used 130 statements in their well-publicized scale construction concerning attitudes toward the church (10). Using the $n(n-1)/2$ equation as the resulting number of judgments to be performed, 130 statements represent a required 8,385 comparative judgments per judge!

The Method of Summated Ratings

This method presumes that the statements can be accurately divided into two classes, favorable and unfavorable. The subjects are then directed to separate the statements into five categories; strongly disagree, disagree, undecided, agree, strongly agree. An example of this method is shown in the following table.

TABLE I

The frequency and proportion of subjects falling into each of five categories and the corresponding normal deviates.

	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	STRONGLY AGREE
(1) f	26	86	42	26	20
(2) cf	26	112	154	180	200
(3) p	.130	.430	.210	.130	.100
(4) cp	.130	.450	.770	.900	1.000
(5) Midpoint cp	.065	.345	.665	.835	.950
(6) z	-1.514	-.399	.426	.974	1.645
(7) z + 1.514	.000	1.115	1.940	2.488	3.159
(8) z rounded	0	1	2	2	3

The line (1) entries are the frequencies with which the statement was placed in each category and the entries of line (2) are the cumulative frequencies. The line (3) entries are the proportions of classification in each category and those of line (4) are the cumulative proportions. The line (5) entries are the midpoint cumulative proportions, obtained by adding the proportion below that category and one-half the proportion within that category. The line (6) entries are the normal deviates from a table of the normal curve for the midpoint cp of line (5) while line (7) is obtained by adding the absolute value of the most negative entry of line (6) to all entries of that line. The entries of line (8) are the values that are assigned to the various answers to this particular statement and they are obtained by rounding off the line (7) entries to the nearest integer.

The computations and the table shown above were done for a favorable statement. The methodology for an unfavorable statement is the same except that the column headings would be reversed. In this way, a 'strongly agree' rating to an unfavorable statement would result in a zero score, as would a 'strongly disagree' rating to a favorable statement.

As the name of this method implies, a subject's score is a summation of the individual scores from all statements with the 'z rounded' entries being used as the individual scores. Better separation of scores may be obtained by rounding off to the nearest half rather than to the nearest integer.

In this method, it is the subjects to be rated who actually determine the scale values to be used in the ratings, resulting in a 'relative scale' for use within that group only. To use this method to measure loyalty or allegiance in a counterinsurgency situation, establishing a different relative scale for each village would yield no useful results because there would be no correlation between the scores of one village and those of another village. If we were able to select a random sample of villages from all parts of the country in question, however, and obtain the necessary classifications of our statements from them, the resulting scale could be of more value for classifying villages throughout the country than one of the other methods that uses judges who may not be directly connected with the area. It would be very interesting to see what the correlation would be between a scale obtained from villagers and one from a group of judges, using the same statements.

A relative scale obtained from the people of the country in which we are interested would require a truly random selection of villages to be used for the scale construction. Numerous methods for obtaining random selections are in use by Gallup and the various pollsters in this country and their basic principles could be used in obtaining a random selection of villages, even though variations in details may be necessary from country to country.

The Method of Equal-Appearing Intervals

This method is the one Thurstone and Chave used when they attempted to measure attitudes toward the church (10). After they had gathered 130 statements and opinions, they had them mimeographed, one to a page, and gave a set of them to each of 345 judges. The judges were then instructed to separate the statements into eleven categories, labeled A through K, where A denotes those statements which, in the opinion of that judge, express the highest appreciation of the issue. F denotes those of a neutral character and K denotes those statements having the highest depreciation of the issue while the categories between A - F and F - K are gradings of the appreciation of the issue. Numerically grading the categories with A = 0-1, B = 1-2, . . . F = 5-6, . . . K = 10-11, the cumulative frequencies for each category were tabulated.

In this method, the 50th percentile is considered the scale value and the distance between the 75th and 25th percentiles is called the Q-value for that statement. Statements with large Q-values are discarded as being ambiguous and the remaining statements are considered acceptable as an attitude scale.

Each person whose attitudes were measured was asked to mark those statements which he thought were in accord with the issue. In compiling the score, the mean value for each interval was used rather than the exact numerical score previously computed for each statement, i. e., 1.5 was assigned to each statement falling within the first usable interval, 2.5 for the next and so forth, up to 9.5 for the last usable interval. As a test case, college students were tested as to their attitudes toward the church. The results were reasonable, with the divinity students having the group score indicating the most favorable

attitude toward the church.

The reliability of the scale was checked by dividing the scale into two halves and having groups test on each half separately. The statements were ranked in ascending scale value and divided into pairs. The first statement from each of the odd-numbered pairs were put into group A and the first statement from each of the even-numbered pairs were put into group B so that the final score from each group should be approximately the same. Thurstone found the correlation between his sets of scores to be .848 and, using the Spearman-Brown formula,

"the estimated reliability of the whole scale is 0.92, which is quite satisfactory." (10)

After his check for reliability, Thurstone then went on to test for ambiguity and irrelevance of the statements. (10) These procedures are a necessity in producing an attitude scale and should be used in any actual construction of such a scale.

It is evident that in this method there is no check on the basic assumption that the intervals into which the statements are sorted are, in fact, equal. When the same statements are scaled by the Method of Paired Comparisons and the Method of Equal-Appearing Intervals, Hevner showed that the relationship is approximately linear except at the extreme ends of the scales. (9) This study indicated that when a statement has an extreme value on the continuum, as established by the Method of Paired Comparisons, its corresponding value on the Equal-Appearing Interval continuum will be less extreme, i.e., it will be closer toward the center of that continuum. In considering this problem, Attneave concluded that:

"The source of this distortion is fairly evident on 'a priori' grounds. The ratings of a given item by a number of judges will, when unrestricted, tend to distribute themselves normally about the hypothetically 'true' rating; but when the 'true' rating

falls at an extreme, variability is possible in only one direction. The distribution obtained in the latter case will therefore be skewed away from the end of the scale, yielding a mean (or median) too close to the center." (13)

The reason for this distortion is also evident if we look at the statistics being used. Statistically speaking the method is making a normal approximation to the binomial distribution and it is well known that this approximation does not yield good results at the extremes of the distribution.

The Equal-Appearing Interval scaling does not require the judges to discriminate between statements placed in the same category. If, early in his judging, a judge finds a statement which he regards as very unfavorable, he will place it in the most extreme category. If he later finds another statement that he regards as even more unfavorable than the first, however, it nevertheless goes into the same category because he is not required to discriminate between individual statements. Thus, if many statements have scale values that are close together, at one extreme of the Equal-Appearing Interval continuum, the scale values would show a much greater spread if they were determined by a method which forces discrimination between them.

The Method of Successive Intervals

This method was designed to eliminate the major assumption of the Equal-Appearing Interval Method, namely, the assumption that the intervals are in fact equal. Rather than assume an interval width, the Method of Successive Intervals determines the widths and the scale values via definite computational procedures. The sorting or judging of the statements is done in the same manner as it is done in the Equal-Appearing Interval Method. Entries like those in Table II would be made for all statements which were judged, where

f is the frequency with which the given statement was placed in each category,

cf is the cumulative frequency for the particular statement,

and

cp is the cumulative proportion for that statement in each category.

TABLE II

Frequencies, cumulative frequencies, and cumulative proportions for each statement in an arrangement of interval width data.

		SUCCESSIVE INTERVALS								
STATEMENTS		Unfavorable			Neutral			Favorable		
		1	2	3	4	5	6	7	8	9
1	f	2	4	12	12	26	52	60	26	6
	cf	2	6	18	30	56	108	168	194	200
	cp	.010	.030	.090	.150	.280	.540	.840	.970	1.000
2	f	0	0	0	2	4	20	88	74	12
	cf	0	0	0	2	6	26	114	188	200
	cp	.000	.000	.000	.010	.030	.130	.570	.940	1.000
3	f	2	12	32	28	36	52	24	10	4
	cf	2	14	46	74	110	162	186	196	200
	cp	.010	.070	.230	.370	.550	.810	.930	.980	1.000
4	f	8	18	32	34	50	28	20	4	6
	cf	8	26	58	92	142	170	190	194	200
	cp	.040	.130	.290	.460	.710	.850	.950	.970	1.000
5	f	4	24	36	38	14	32	24	20	8
	cf	4	28	64	102	116	148	172	192	200
	cp	.020	.140	.320	.510	.580	.740	.860	.960	1.000

We assume that the proportion distributions are normal when projected on the unknown continuum, and define the scale values of the statements to be the means of these normal distributions. We will be

able to find the normal deviates corresponding to the boundaries of the successive intervals for each statement by entering the table of the normal curve with the cumulative proportions (cp) of Table II.* When compiled in a table, these normal deviates appear as in Table III.

TABLE III

Normal deviates z_{ij} corresponding to the upper limits of the successive intervals for the cumulative proportions (cp) of Table II.

STATE- MENTS	SUCCESSIVE INTERVALS							
	1	2	3	4	5	6	7	8
1		-1.881	-1.341	-1.036	-.583	.100	.994	1.881
2					-1.881	-1.126	.176	1.555
3		-1.476	-.739	-.332	.126	.878	1.476	2.054
4	-1.751	-1.126	-.553	-.100	.553	1.036	1.645	1.881
5	-2.054	-1.080	-.468	.025	.202	.643	1.080	1.751

Now, by considering the entries in a single row, we may arrive at an estimate of the interval widths on the continuum. If we let w_{ij} be the interval widths, where

$$w_{ij} = z_{ij} - z_{i(j-1)}, \quad (8)$$

we will form another table of estimates of the interval widths (Table IV). Since the w_{ij} for which j is constant and i takes on all values are estimates of the widths of the same interval, we will assume that the best estimates are the arithmetic means of the column entries in Table IV.

* Tables (3) through (5) are reproduced from Edwards' "Techniques of Attitude Scale Construction" except that only the first five of his set of fourteen statements are used here. (4)

TABLE IV

Estimates of interval widths w_{ij} obtained from the differences between the upper limits of the intervals as shown in Table III

STATEMENTS	SUCCESSIVE INTERVALS						
	2 - 1	3 - 2	4 - 3	5 - 4	6 - 5	7 - 6	8 - 7
1		.540	.305	.453	.683	.894	.887
2					.755	1.302	1.379
3		.737	.407	.458	.752	.598	.578
4	.625	.573	.453	.653	.483	.609	.236
5	.974	.612	.493	.177	.441	.437	.671
(1) Sum	1.599	2.462	1.658	1.741	3.114	3.840	3.751
(2) n	2	4	4	4	5	5	5
(3) $\bar{w}_{.j}$.800	.616	.414	.435	.623	.768	.750
(4) Cum. $\bar{w}_{.j}$.800	1.416	1.830	2.265	2.888	3.656	4.406

The sums of line (1) are the column sums and the n's of line (2) are the numbers of terms in each column. The $\bar{w}_{.j}$'s of line (3) are the arithmetic means of the terms in the columns and the line (4) entries are the cumulative arithmetic means. The line (4) entries are further taken to be the cumulative interval widths on the attitude continuum.

To compute the scale values for the statements, we use the formula

$$S_i = L + ((.50 - p_b)/p_w)\bar{w}_{.j} \quad (9)$$

where

S_i = the scale value of the i th statement,

L = the lower limit of the interval on the continuum in which the median falls,

p_b = the sum of the proportions below the interval in which the median falls,

p_w = the proportion within the interval in which the median falls,
and

$\bar{w}_{.j}$ = the width of the interval on the continuum.

To find the scale value for the first statement, we look in Table II and see that the median falls in the 6-5 interval, the median being the cumulative proportion of .500. The lower limit of the 6-5 interval is the "Cum. $\bar{w}_{.j}$ " entry of the preceding interval from Table IV, so that for the first statement, $L = 2.265$. The p_b value is found from Table II under successive interval 5 or a value of .280. The p_w value is the difference between successive interval 6 entry minus the successive interval 5 entry from Table II. Therefore, using $\bar{w}_{.j}$ entry from Table IV (row (3) under Successive Interval 6-5),

$$S_1 = 2.265 + ((.50 - .28)/(.54 - .28)) (.623) = 2.792.$$

The scale values for the other statements may be found in a similar manner.

The Method of Successive Intervals does not allow us to estimate the interval widths for either of the two extreme intervals. If we have x successive intervals, we are able to compute widths for only $x-2$ of them. Edwards recommends using enough successive intervals so that the possibility of any statement having more than 50% of its judgments falling in an extreme interval is small.

There is a method of estimating the widths of the extreme intervals in the event that more than 50% of the judgments for one or more statements fall into an extreme interval. Initially, all statements with a proportion of judgments of .04 or more in the first interval are to be used when estimating those with more than 50% in the first interval. An estimate of the midpoint of the first interval is one-half the proportion of judgments falling below the upper limit of the first interval. The normal deviates

for the midpoint and the upper limit of the first interval are found and the differences for each statement are computed. The arithmetic mean of the sum of these differences will then be the estimate of the width between the midpoint and the upper limit of the first interval when projected on the continuum. What is done, in essence, is to shift the origin of the continuum from the upper limit of the first interval to the midpoint of that interval. There is still no lower bound for the first interval so that we cannot find the true width of the entire interval. Table V shows what is done to estimate the half-width of the first interval, which is necessary because statement 4 has more than 50% of its judgments falling in the first interval.

TABLE V

Proportions falling below the midpoint and upper limit of the first interval and normal deviates corresponding to the proportions for seven statements.

STATEMENTS	PROPORTION FALLING BELOW		NORMAL DEVIATE		DIFFERENCE (4) - (3)
	Midpoint	Upper Limit	Midpoint	Upper Limit	
	(1)	(2)	(3)	(4)	
1	.100	.200	-1.282	- .842	.440
2	.150	.300	-1.036	- .524	.512
3		.020			
4	.280	.560	- .583	.151	.734
5	.020	.040	-2.054	-1.751	.303
6	.075	.150	-1.440	-1.036	.404
7	.040	.080	-1.751	-1.405	.346
SUM					2.739

Statement 3 was not used in the computation because there were less than 4% of its judgments falling in the first interval, a criterion that was used previously to eliminate the use of extreme values. The estimated width from the midpoint to the upper limit of the first interval

is equal to the sum, divided by the number of statements used in the computations, or, $2.739/6 = .456$. The scale value of the fourth statement is computed as before, using

$$\bar{w}_{.j} = .456,$$

and

$$p_b = p_w = .28,$$

where .28 is the proportion of judgments falling between the midpoint and the upper limit and is also the proportion falling below the midpoint. Therefore, with $L = 0$,

$$S_4 = ((.50 - .28)/.28) (.456) = .358.$$

If more than 50% of the judgments for any one statement fall in the last interval, a method similar to the one just described for the first interval would have to be used because there is no upper limit which we can use to estimate the width of the last interval.

To find each midpoint, we take the proportion of judgments falling below the last interval, subtract it from one, and divide that result by two. Next, we find the normal deviates for this lower limit and the midpoint, find the difference between these values and sum all such differences. Dividing this sum by the number of statements used will yield the estimate of the width on the continuum from the lower limit to the midpoint of the last interval. As before, a statement is not used if the difference between the lower limit and unity is less than .04. The scale value is computed as before.

This is briefly the method of successive intervals. There are checks for internal consistency, ambiguity and so forth, which are described in Edwards. (4)

Attitude Scales and Counterinsurgency Operations

Of the four methods presented here, the Method of Summated Ratings appears to be best for the development of a measure of effectiveness for counterinsurgency operations, if we are able to obtain the answers we need to construct the relative scale from the people of the country in which we are interested. It is felt that this type of scale, based on responses of the people of a particular country, would be better able to measure the attitudes of other people of that country.

If the general tone of loyalty and allegiance begins to change throughout the country, it will be necessary to construct another relative scale so that the periodic measuring of attitudes will have some relation to the scale values being used.

In the event it becomes impractical to implement the Method of Summated Ratings, the Method of Successive Intervals appears to be the next most preferred method because: (1) the Paired Comparison Method requires excessive numbers of judgments and excessive computational effort and (2), the Equal-Appearing Interval Method lacks the precision that the Successive Interval Method may have in the extreme intervals.

With this methodology available to construct an attitude scale for the measurement of allegiance in counterinsurgency operations, one might ask just what kinds of statements should be used in the construction and from whom the opinions should be obtained. For example, it would seem reasonable that those best qualified to know about the villagers of Southeast Asia are selected villagers from Southeast Asia. One possible way to proceed with the construction of an attitude scale would be to gain access to a group of villagers whom we could persuade to write out their opinions about the government. If this were not possible, we

should go to those persons who know most about the subjects and issues in which we are interested. Missionaries who have worked in the country seem to be a good source of information, as would anthropologists familiar with the country and its people. Experimental psychologists and other behavioral scientists might be helpful because of their experience with constructing attitude scales. Former civic action officers and advisors, and perhaps even diplomats to the area in question would know the people well enough to assist in developing a set of statements and opinions. It may be profitable to have persons of one type of background sort or judge the statements developed by persons with a different background.

The following chapter discusses just what we want to measure and what we should expect these measurements to show us. There is also discussion of what types of questions or statements might be used and the areas they should cover.

VI. INDICATORS OF POPULAR SUPPORT

Allegiance

The concept of allegiance, loyalty, or patriotism is not interpreted in the same way in each country and at each point in time. It would, for example, be extremely difficult to measure the government allegiance of the inhabitants of a transitional country using measures relevant to patriotism in the United States. It might be more appropriate to attempt to measure the people's willingness to be controlled by their government or their willingness to cooperate with their government, to heed government advice, and to accept governmental programs. It is probably true that the majority of the people of the United States would be more willing to sell their merchandise to the U. S. government even though the Iron Curtain countries offered a higher price. It should not be expected, however, that the people of South Vietnam, would not sell their rice to the Viet Cong if the price differential were much higher.

In attempting to capture the "hearts and minds" of the people whose country is torn by an insurgency, we must be realistic as to the extent to which this is possible. It is quite possible that our Western concept of allegiance will have to be altered during the initial phases of a counterinsurgency and that we should be initially satisfied with something less than complete "Western allegiance" from the people. We would hope that as time passed and as the insurgents' influence among the populace abated, the people would begin to identify with their government and that an attitude of allegiance as we know it would begin to develop.

Indicators To Be Measured

There have been several attempts to list the indicators of popular support that comprise the overall control of the people by the insurgent or counterinsurgent but S. N. Bjelajac has probably compiled the most extensive and detailed list. (2) He lists eleven "interactive guidelines", the measures of which collectively represent a comprehensive measurement of the overall degree of control enjoyed by the insurgent or counterinsurgent. Nine of these guidelines are discussed below, along with some sample questions which give some idea of the type that could be used in a questionnaire designed to measure the allegiance of the people of an insurgent-torn country. A more extensive list of questions is contained in Appendix C. The remaining two guidelines are concerned with measures of security and it will not be discussed here.

In the following discussion of the guidelines, all quotations are taken from Bjelajac's report unless otherwise stated. It is felt that no reliability will be lost by using statements to construct the attitude scale and then converting the statements to questions for use in the questionnaire.

Political Control

"The degree of political control exercised over the administrative subdivisions of a given area can be measured in terms of control of the many individual institutions through which political and governmental activities are manifested."

To make this questionnaire one which the individual villager can answer, it will be necessary to avoid questions of a general nature. While support of the government's counterinsurgency programs by the village council or elders is important, it is not a measure of this acceptance by the individual villager. Examples of questions directed at the individual might be, 'If you were offered a position of responsi-

bility in the village, would you unhesitatingly accept?', and, 'Would you be willing to serve on the police force of your village?'

It is seen that rather than being measures of loyalty, these questions could be considered as being merely a test of whether or not the villager believes that government security is effective for that area and is likely to continue so. It is felt, however, that these questions will have merit in their proposed task, especially when considered with the remainder of the questions in the questionnaire.

Control of Intelligence

"The pattern of the flow of intelligence is an excellent general barometer of progress in insurgency/counterinsurgency. The details of this pattern must be analyzed systematically, for the conclusions to be drawn vary widely with such factors as the quantity and quality of intelligence, its subject orientation, its method of acquisition, and its sources."

Because the source of intelligence is a significant indicator of progress, (i.e., information volunteered by the people indicates a willingness to support the government), we may ask, 'If you knew of something the Viet Cong were doing or were planning to do that was detrimental to the South Vietnamese forces, would you report it to a government official?'

Also significant is the type of information that is volunteered. We would expect that someone who is completely pro-government would volunteer all types of information about Viet Cong activities and in particular, information concerning the clandestine operations within and near the village. A question might be, 'If you knew that a member of your village or someone living within your village were working for the Viet Cong, would you report him to the government?'

The scope of government intelligence coverage is also important but perhaps a little less easy to grasp for our purposes. Data on the endurance of government intelligence nets and the coverage within disputed

and enemy controlled areas may well have to be garnered by evaluation and opinion of the area advisor as is currently the case in Vietnam. A measure of the scope of intelligence might be the willingness of the villagers to risk reporting minor as well as major insurgent plans. It is conceivable that a villager would risk Viet Cong reprisal to report known plans of major Viet Cong activity but that they would be reluctant to risk themselves to report plans of minor activities.

Public Opinion and Propaganda

"Popular allegiance and support - not geographic areas under control - are the ultimate measures of success for either side.

"When attitudes need to be changed, the professional propagandist normally bases his appeals both on sentiment and logic. Each of these are in themselves composed of many factors. Either may predominate; however, more often appeals to sentiment carry the greater weight."

While

"There are several approaches to estimating the extent to which the insurgents or the counterinsurgents are successful in disseminating their information policies and the degree to which these disseminations appear to influence public opinion,"

many are of the type that cannot be investigated by questioning or polling individuals. The extent to which the press and other public media contribute voluntary government support and the amount of influence the government is able to exert over non-governmental public and private organizations are examples. Individual responses to the use of government-oriented news and propaganda media could be useful, as well as the attendance at pro-government meetings and rallies.

Political Aspects of Education

"The term political aspects of education is, for the sake of this discussion, intended to embrace those aspects of ideological indoctrination carried out within the institutional framework of the public educational system."

Again, there are many areas of general concern that may not be

measurable by individual responses, such as the number of schools active within the system, the overall attendance rate, the competence of the teachers, etc.

The willingness of the people to send their children to the schools; the alacrity of the individual to aid in the re-establishment of the school system in the event of military, guerrilla, or terrorist disruption; the degree of support for a pro-government teacher are all indicators of the pro-government leanings we are seeking.

Control of the Legal System

There must be

"...respect for the courts, laws, and other legal instruments of government by the public, as opposed to acquiescence to insurgent attempts to establish their own shadow government."

This may be measured in part by the willingness of the people to resolve any legal disputes they may have through the village, district, or province legal processes.

As in so many areas dealing with human emotions and opinions, it is not necessarily what the situation actually is that matters, but rather it is what the people think the situation to be that is of prime importance. In other words, no matter how effective the government law enforcement agencies, unless the people believe they are being protected and that the police are not unduly harsh and unfair, we are not being successful in our attempts to alter public opinion from pro-insurgent to pro-counterinsurgent. Therefore, the questions for our questionnaire should probably be like the following:

- a. Do you believe government supporters and sympathizers are adequately protected?
- b. Do you believe the government laws are fair and just for all people?

- c. If you had a dispute with your neighbor, would you go to the police and government courts for settlement?
- d. Do you agree with the government policy of severe punishment for those convicted of political, economic, or other crimes against the security of the country?

Also important is the trend of opinion over time; the changing of public opinion from anti-government to pro-government. Trend analysis questions should probably be incorporated into each of the "interactive guidelines" when the actual questionnaire is developed.

Community Services and Civic Action

"The question of who effectively controls civic functions in an area and thereby plays the role of social reformer is in itself one indicator of the trend of political control within the area. Each area must, of course, be evaluated in the light of its actual political, psychological, and military situation, taking into account the fact that some areas are of greater strategic importance than others. Political trends within the country as a whole may be derived from a careful and weighted analysis of such trends within individual areas."

We cannot say that the mere doing of what we feel the people need will constitute an adequate civic action program. Here again, it is of paramount importance to consider not what the facts actually are, but what the people think they are. An extensive post-high school educational system might be of long-range importance but the people of Vietnam may not favor it, since a fourth grade education is considered the ultimate at this time. Questions, therefore, might pertain to opinions as to whom is responsible for the maintenance of community services.

In Vietnam, the Revolutionary Development Teams feel they have achieved some measure of success by the fact that the Viet Cong keep harassing them and attacking villages where the Teams have been or are active. It is felt that repeated attacks by the insurgents on any government program may be taken as an indication of the success of that program. A village's willingness to help rebuild the accomplishments

of the program after an insurgent attack would seem to reflect his belief in the program and in the sponsor of the program.

Control of Transportation and Communications

The control of transportation and communications is generally a larger and more general type measurement and is not directly relatable to the individual villagers. A villager might be asked about his trepidation, or lack of it, in traveling the public roads of the country. Also, his willingness to work in or become part of a government warning net or system would be a plus for the government.

As with other categories, the voluntary reporting of insurgent activities to the government forces and his willingness to do so is indicative of government progress in the area.

Control of Recruitment

The ability to gain voluntary recruits is obviously a plus factor for either side. A negative indicator, on the other hand, is the necessity to use political controls or other coercive forms of persuasion or social pressures to gain the necessary recruits. The positive involvement of a potential recruit's family is also considered a plus factor. Therefore one may pose questions on the willingness of the father to allow his son to enlist or become part of the government forces. A negative indicator would be the willingness of the villager to become or allow his dependents to become members of the insurgent infrastructure.

Economic Controls

The ease of collecting taxes from the populace is a measure of pro-government attitudes, while increasing difficulty in tax collection becomes a measure of increasing pro-insurgent feelings. We might ask

'Are you angered by the need and the amount of taxes you pay the government?'

'Do you think you should pay taxes to the Viet Cong?'

'Do the Viet Cong take their taxes by force?'

Without a strong sense of allegiance to the government, which seems lacking at this stage of progress in Vietnam, it is reasonable to expect a villager to sell his produce to the highest bidder in an open market. Thus, one question might ask;

'Given equal prices, would you rather sell your goods to the Viet Cong or to the government?'

Administration of The Questionnaire

It may be thought that a measure of effectiveness that was directly concerned with the people could be incorporated into a month by month, hamlet by hamlet evaluation and would be truly reflective of the true state of general feeling toward or against the government. The possibility that the people will recognize what answers the questioners would like to hear and will answer accordingly does exist, however. The possibility that they will learn the questionnaire if it is repeated too often and that the answer will thenceforth lose meaning is also present. The first problem could conceivably be overcome by the judicious choosing of questions that should have the same answer even though the questions are of different forms. This is sometimes called a lie scale, which is imbedded within the questionnaire and serves to give some measure of the reliability of answers to the analyst.

The second problem could present difficulty. It is possible that for a measure of effectiveness to be at all useful, it must be used only about once a quarter or less. If it is found that the Hamlet Evaluation System currently in use appears to be giving fairly good results, then the questionnaire developed could be used as a more accurate measure of the feelings of the populace. It might be used to point up weaknesses

in the other measures of effectiveness and cause alteration in their makeup.

It would seem that the Hamlet Evaluation System would be useful on a monthly basis and that the system proposed here would be of value in pinpointing trouble areas within a hamlet or village and in describing more fully just what the popular opinion really is. This could be done quarterly, to offset the learning of the questionnaire, and in conjunction with the Hamlet Evaluation System should result in a fairly accurate idea of how we stand in a country besieged by insurgents.

VII. CONCLUSIONS AND RECOMMENDATIONS

'Winning the hearts and minds of the people' is a very tired cliché but represents a task that must be accomplished. The people of the country engaged in an insurgency should be the object of our efforts and strategies. We should be primarily interested in separating the people from the insurgent's influence and in protecting them from the terrorist and oppressive activities of the insurgent guerrillas.

With an objective of this kind, it is quite obvious that it will be extremely difficult to find a measure of effectiveness that actually reflects progress in the attainment of our objective, the winning over of the people, and is at the same time quantitatively measureable.

It would be desirable to find several indicators that we knew were indicative of the attitudes of the people and to watch these over time. Indicators being used by two agencies in Vietnam today are generally related to things we believe should happen if the people are in fact being persuaded to follow the government line. In addition, most of the scoring for these indicators is done by U.S. military personnel without going directly to the people to discover their feelings.

It is felt that the present systems need at least a complementary system that will measure the feelings of the people. Several methods used by psychologists to measure attitudes and human intangibles seem to have value for our purposes. Of the four methods discussed, the Method of Summated Ratings appears to have the most value for us. Its value depends upon our ability to use information from a random sample of villages from the country in which we are interested to construct a

'relative scale' for use throughout the country. If this is not possible, the Method of Successive Intervals seems to be applicable for our purpose.

The questions or statements to be used in this questionnaire should be related to what the villagers think the situation in his country is and what he thinks it should be. In the event there are no persons familiar with the country to write out the opinions and statements for use in the construction, it is felt that psychologists, anthropologists, etc. might be utilized for this task.

If it is felt that since such a questionnaire is liable to learning by the villagers, it could be used strictly as a complementary system with those in use now, possibly on a quarterly or semi-annually basis.

BIBLIOGRAPHY

- (1) Anastasi, Anne Psychological Testing (2nd ed.), New York: The Macmillan Company, 1961.
- ✓(2) Bjelajac, S. N. "Guidelines for Measuring Success in Counter-insurgency," McLean, Virginia: Research Analysis Corporation, 1966.
- ✓(3) Department of The Army. "U.S. Army Handbook of Counterinsurgency Guidelines for Area Commanders," Pamphlet No. 550-100, Headquarters, Department of The Army, January, 1966.
- (4) Edwards, Allen L. Techniques of Attitude Scale Construction, New York: Appleton-Century-Crofts, Inc., 1957.
- ✓(5) Galula, David. Counterinsurgency Warfare, Theory And Practice, New York: Praeger, 1964.
- (6) Gross, Martin L. The Brain Watchers, New York: Random House, Inc., 1962.
- (7) Headquarters (G-2), Fleet Marine Force, Pacific. "A Marine's Guide To The Republic of Vietnam," 1966.
- (8) Paret, Peter and John W. Shy. Guerrillas in the 1960's, London: Pall Mall Press, 1962.
- (9) Thurstone, Louis Leon, The Measurement of Values, Chicago: The University of Chicago Press, 1959.
- (10) _____ and E. J. Chave. The Measurement of Attitude, Chicago: The University of Chicago Press, 1929.
- (11) Tiffin, Joseph and Ernest J. McCormick. Industrial Psychology (4th ed.), Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961.
- ✓(12) Valerino, Napoleon D. and Charles T. R. Bohannon. Counter guerrilla Operations, The Philippine Experience, New York: Praeger, 1962.
- (13) Attneave, F. A. Psychol Rev., 1949, 56, 334-340.
- (14) Hevner, Kate. J. gen. Psychol., 1930, 4, 191-212.
- (15) III Marine Amphibious Force/Naval Component Command Order 5081.1A.

APPENDIX A

REPORT OF PACIFICATION PROGRESS

PART I - INSTRUCTION

1. There are basically five objectives which have to be accomplished before an area can properly be rated as pacified:

(a) All organized Communist military forces must be driven out of the area or destroyed, and the Army of the Republic of Vietnam (ARVN) and/or the Regional Forces must have developed the capability to destroy organized Communist forces locally.

(b) The Communist infrastructure must be detected and destroyed and steps taken to prevent its restoration.

(c) Government of Vietnam local security plans and forces must be established for protection against small unit and guerrilla attacks.

(d) Loyal village and hamlet governments must be established and functioning.

(e) Minimum new life development programs must be completed.

2. In determining the method to be used in evaluating pacification progress, the following principles have been utilized.

(a) Each of the foregoing objectives are of equal importance.

(b) There are certain specific, relatively easily ascertainable manifestations or progress toward the attainment of each of the above objectives which should be recognized as they are accomplished.

(c) Progress toward the accomplishment of each of the above objectives may be made simultaneously, so that it is not necessary to have accomplished all of the objectives in one category before progress can be recorded in one of the other categories.

3. The following instructions should be adhered to in completing part II of this report:

(a) TAOR. This will be either "Phu Bai," "Danang" or "Chu Lai."

(b) Area No. Each village within each TAOR will be assigned an Area No. by the appropriate Civic Action Coordinator assigned pursuant to reference (a) no later than 25 March 1966 and this designator will be permanent. (In the Danang TAOR, the City of Danang is hereby assigned as "Area No. 1" and Mao Lang Village, Moa Vang District is assigned as "Area No. 2." The Commanding General, 3d Marine Division, will assign

all other Area Numbers within this TAOR.) The appropriate "Area No." for the village being evaluated will then always be entered.

(c) Village and District. Enter the name of the village and the district being evaluated.

(d) Date. Since each evaluation is to be made as of the 28th day of each month, enter here "28" and the appropriate month.

(e) General Instruction on Entering Evaluations.

(1) The maximum points attributable for the accomplishment of each objective is set forth in the column headed "Max. Pts." When the stated objective has been fully accomplished, enter that maximum figure; pending full accomplishment, enter that proportion of the maximum points which correctly reflects the percentage of the particular objective which has been accomplished. For example, under Objective III C ("Permanent Local Defense Forces Trained and In Place"), if only one-half of the local defense forces have been trained and are in place, enter the figure "6" opposite the maximum points of "12."

(2) It is possible that there will be periods when there will be a regression rather than progress toward the accomplishment of a specific objective. For example, again under Objective III C, perhaps on 28 April, 50% of the forces were trained and in place, so that the figure "6" would have been entered; on 28 May, however, for one reason or another, only 25% are still trained and in place, for May, then, the figure "3" would be entered.

(f) PARA I - Destruction of Organized Viet Cong Military Forces. Item "A" is self-explanatory, Item "B" has reference to Government of Vietnam forces sufficient to keep out organized Communist military forces as distinguished from Communist guerrilla forces. Reference has to be made to Regional Forces and RVN forces, as distinguished from local defense forces such as Popular Forces and Combat Youth Teams in making this evaluation.

(g) PARA II - Destruction of Viet Cong Infrastructure. Items "A" through "D" are self-explanatory and can be determined from local officials on the scene. Item "E" consists of information which passes directly from the Census Grievance Teams to the Province Chiefs. It will therefore be necessary to monitor progress on this objective through Liaison Officers at provincial levels.

(h) Establishment of Local Security. The objectives set forth under this category must be evaluated not only with reference to the village as a whole, but with reference to Objective III D, ("Communications Established With Military Supporting Unit"). Before this objective can be classified as having been accomplished, each Hamlet Chief or the Commanding Officer of the hamlet local security forces, must have radio communication with a supporting military unit so that he can call in artillery support or for reserve forces in the event of an attack upon his hamlet.

(i) Establishment of Local Governments. The objectives set forth in this category are self-explanatory. Objective IV-I ("Social and Administration Organization of Villagers") must reflect the opinion of the Village Chief and the judgment of the local USMC Civil Affairs Officer.

(j) PARA V - Completion of Initial New Life Hamlet Programs. All of the objectives set forth under this category necessarily reflect the conclusions of the Village and Hamlet Chiefs together with the conclusions of the USMC Civil Affairs Officer responsible for Civic action activities within the village.

(k) PARA VI - Summary. Enter in this portion of the report the total of all five categories of objectives in order to determine a quantified evaluation of pacification progress within the village.

(l) COMMENTS. Under this portion of the report, enter a concise explanation of each of the quantified evaluations of the various objectives listed above, highlighting goals, problems and significant developments in connection with each.

WORK SHEET - PACIFICATION PROGRESS DETERMINATION

TAOR

Area No. _____ Village _____
 _____ District _____

<u>Task</u>	<u>Max.Pts</u>	<u>Pts</u>
I. <u>Destruction of organized V.C. military forces</u>	20	
A. V.C. local main force units destroyed or driven out	15	_____
B. GVN military forces capable of defending area	5	_____
Total points	20	
II. <u>Destruction of V.C. infrastructure</u>	20	
A. Census completed and analyzed	2	_____
B. V.C. infrastructure discovered, destroyed or neutralized	8	_____
C. GVN intelligence network established	5	_____
D. Census grievance teams completed interviewing each family	2	_____
E. Principal grievances have been completely processed	3	_____
Total points	20	_____
III. <u>Establishment of Local Security</u>	20	
A. Defense plans completed	2	_____
B. Defense construction completed	3	_____
C. Permanent local defense forces trained and in place	12	_____
D. Communications established with military supporting unit	3	_____
Total points	20	_____

IV.	<u>Establishment of Local Governments</u>	20	
A.	Village chief and council appointed and functioning	2	_____
B.	Village chief and council elected	2	_____
C.	Village chief lives in village and is able to sleep therein	3	_____
D.	Hamlet chiefs and councils appointed and functioning	2	_____
E.	Hamlet chiefs and councils elected	2	_____
F.	Hamlet chiefs live in hamlets and are able to sleep therein	4	_____
G.	Permanent psy ops and public information services established	3	_____
H.	Village statutes enacted	1	_____
I.	Social and administrative organization of villages completed to meet immediate needs of villagers	1	_____
	Total points	20	_____
V.	<u>Completion of Initial New Life Hamlet Programs</u>	20	
A.	Necessary public health works have been completed to meet initial needs of villagers	4	_____
B.	Necessary educational requirements have been met to meet initial needs of villagers	4	_____
C.	Necessary agricultural works have been completed to meet initial needs of villagers	4	_____
D.	Necessary markets have been established	4	_____
E.	Adequate ground transportation established into and out of area	4	_____
	Total points	20	_____

VI. Summary

A. Destruction of organized V.C. military forces	20	_____
B. Destruction of V.C. infrastructure	20	_____
C. Establishment of local security	20	_____
D. Establishment of local government	20	_____
E. Completion of initial New Life Development Programs	20	_____
Total points	100	_____

APPENDIX B

HAMLET EVALUATION WORKSHEET

DIRECTION FOR COMPLETING HAMLET EVALUATION WORKSHEET: Fill out this form for each hamlet except those in the category of V.C. control. The total number of hamlets under V.C. control should be forwarded as part of your remarks.

1. Identify the hamlet as indicated. The hamlet number is that assigned to the hamlet by the GVN. Type of hamlet refers to Ap Doi Moi, Ap Tan Sinh, Cung Co, Ap Xay Dung, or Ap Binh Dinh.

2. Enter the rating given the hamlet under the present evaluation system i.e., Secured, Undergoing Securing, Undergoing Clearing, or Uncontested.

3. The left hand column of the form lists six subject categories, each with three subdivisions. The columns headed E through A are graded to represent conditions ranging from formerly V.C. Controlled hamlets in which GVN influence is just beginning (E) through stages of increasing GVN influence and activity to the hamlet that is completely secure and in which nation building programs are well underway (A). The items given are intended to suggest steps in progress from E to A, not to describe them fully. Signs of progress indicated at one step should be understood as continuing in the succeeding steps. Items refer to the hamlet itself unless otherwise indicated.

4. Check one box for each of the eighteen subcategories, selecting the grade (E through A) that best fits the conditions relating to each subcategory in the hamlet being evaluated, for that month. For example, you may rate subcategory 1-b as C and subcategory 4-b as E, if the threat

of action by V.C. units from outside the hamlet is no longer immediate but an RD Cadre Team or some other GVN presence has not yet been committed.

(5) Check the appropriate boxes: During the month the hamlet was visited by the evaluator ☐, by a member of his staff ☐, by some other US district team member ☐; by the evaluator's RVN counterpart ☐.

(6) After completing your evaluation of the hamlet, select one of the following five numbers which best represents your estimate, for each of the six criteria, of the confidence you have in the validity of the available information upon which your eighteen ratings were based:

(1) No confidence; (2) Low confidence; (3) Medium confidence; (4) High confidence; (5) Complete confidence. Enter these numbers in the boxes labeled confidence estimate.

FOUO

CONFIDENTIAL WHEN FILLED IN

HAMLET EVALUATION WORKSHEET

Name of Evaluator _____

District _____ Village _____ Hamlet Name _____ Hamlet No. _____ Type of Hamlet _____

Uncontested _____ Undergoing Clearing _____ Undergoing Securing _____ Secured _____ NPA _____

	1	2	3	4	5	6
Confidence						
Estimate	_____	_____	_____	_____	_____	_____

1. VC Military Activities

a. Village Guerrilla Unit

Vil Gs combat effective tho some identified or eliminated; VC Vil defenses largely intact. E

Vil Gs reduced somewhat in men & defenses; can attack in plat strength from within village or near area (10-15 km) D

Military control of Vil broken, most Gs identified, 50% losses, havens destroyed, activity below plat level; can harass but not prevent GVN activities in hamlet C

Vil G control reduced to 1-2 hamlets on Vil periphery; could make desperation raid. Activities of Gs from adjacent Vils limited by no havens or friendly defenses. B

Vil G remnants driven out. No threat of harassment or intimidation from Gs in adjacent Vils. A

b. External Forces (EF) (Prov. Main Force, unit in district)

EF intact; may have base & can make company-sized attacks within 15 km of hamlet. Hamlet or Vil may have been fired on and/or assaulted during month. E

Unit in district reduced up to 25%; EF otherwise as in E. D

Unit in district reduced up to 50% in men & arms, or bases near hamlet destroyed. No VC operations company-size or larger, no mortar or RR fire near hamlet during month. C

1. b. (cont.)

Bases in district or near hamlet destroyed; unit in district only marginally effective. Not capable of company-size operations.

B

Unit in district eliminated or ineffective; no attacks by plat or larger & no mortar or RR fire in district or near hamlet. Attack possible only from outside district.

A

1. ³c. Military Incidents
Effecting Hamlet

Armed VC units in hamlet at night, sometimes in day. Little GVN authority at night. Routes to hamlet interdicted by day; may be ambush near hamlet.

E

GVN activity under harassment. Frequent sniping on routes to hamlet; VC night activity in hamlet.

D

Long range fire at night; VC activity in adjacent hamlets in Vil. Occasional sniping on routes to hamlet.

C

No incidents in hamlet during month; infrequent harassments within village or nearby.

B

No incidents, including harassments in Vil or near hamlet or on routes to Vil during month.

A

2. VC Political & Subversive Activities

✓ a. Hamlet Infrastructure

Party cadre underground by day but free to intimidate populace at night. No assurance party structure or leaders uncovered.

E

Members and most leaders of VC hamlet organizations uncovered & neutralized but undercover agents still operative.

D

Intel indicates most of Party apparatus identified; some agents under Vil or Dist control still operative.

C

All normal Party apparatus identified & dealt with; agents under Vil or Dist control eliminated.

A

2. a. (cont.)

No reason to doubt whole Party apparatus eliminated or neutralized.

A

5 2. b. Village Infrastructure

Despite some individual identification, Vil apparatus intact, functioning

E

Some Vil cadre eliminated but apparatus fairly effective

D

Most key members of Vil apparatus identified, up to half neutralized; effectiveness curtailed

C

Most of Vil apparatus leaders eliminated; almost all members identified. Little coordinated VC activity in Vil

B

Vil organization wiped out. Few covert agents directed from outside but stymied by friendly security organizations.

A

6 c. Activities Affecting Hamlet

VC apparatus can undermine GVN in hamlet by incidents ranging from propaganda thru terrorism & sabotage, at least at night.

E

No overt propaganda but terrorism or sabotage during past month.

D

No overt VC incidents in hamlet, few signs of covert subversion.

C

No subversion in hamlet & no incidents in adjacent hamlets during month.

B

No subversive activity in Vil during month.

A

3. Security (Friendly Capabilities)

No night defense except by external forces although required.

E

9 a. Hamlet Defense Plan & Organization

Day & night defense by external forces. Local recruiting & training underway.

D

3. a. (cont.)

Local warning & communication systems operative; some armed local defenders but main reliance on RD cadre or external defense.

C

Defense force organized; adequate plan and communications for its use.

B

Adequate defense force & adequate defense plan following Prov RD plan.

A

8 b. Friendly External Force (FEF) Assistance

FEF do not meet needs for arty, air support, reaction ground forces, etc.

E

FEF meets needs but only effective marginally, e.g., delayed response, no night response, not aggressive, etc.,

D

Availability and effectiveness of FEF generally meet needs.

C

Need for FEF less than C; can be met adequately.

B

Need for FEF very slight; can be met adequately

C

9 c. Internal Security Activities

No agents, no intelligence from public except possible sporadic police informants.

E

No complete intelligence system; a few trained or voluntary informants & some data from RD census grievance work.

D

Hamlet chief gets useful info from informants, census grievance &/or some volunteers.

C

Effective informant system; considerable useful info from public.

B

Hamlet Chief directs effective internal security apparatus; security deputy, police, informant system, willing public participation.

A

4. Administrative & Political Activities

10 a. GVN Governmental Management

Temporary or external GVN officials; effective marginally, usually present only in daytime.

E

Some local participation in hamlet management; officials present usually only in daytime.

D

Managerial groups resident; mostly local appointed or elected, usually present at night.

C

Complete managerial group is fully resident; includes elected hamlet chief & deputy; fully functioning but with some external support.

B

Elected, autonomous governing body, under autonomous Vil; all officials in hamlet & Vil resident.

A

11 b. Census Grievance Program

Only limited census activity; no grievance program.

E

Census grievance program started systematically.

D

Initial census grievance survey complete; some individual grievances being resolved.

C

More GVN actions being taken to meet people's grievances & aspirations.

B

Permanent GVN grievance representative in place. Substantial evidence of GVN efforts to meet aspirations.

A

12 c. Information/PSYOP Activities

Little or none.

E

Minimal activity; public indifference.

D

Regular and frequent activity even if makeshift; public impact evident; civic associations being developed.

C

Systematic coverage; increased awareness of govt programs & personnel. Increased numbers of ralliers; people participating freely in civic associations.

B

4. c. (cont.)

Resident official executing
imaginative & regular program
Active public awareness of GVN
personnel, impending elections,
district programs, etc.; civic
actions active and effective

A

5. Health, Education &
Welfare

Only infrequent visits by MEDCAP
or cadre team

E

13- a. Medical Services &
Sanitation

Only periodic, scheduled MEDCAP
or cadre team visits.

D

Full-time coverage by external
teams; includes sanitation in-
struction.

C

Resident trained medic who supervises
sanitation & public health programs
with some public participation.
Trained midwife in hamlet or nearby.

B

Resident trained medic continues
effective medical & sanitation
programs with general public parti-
cipation. Resupply of medicines
regular & adequate.

A

14 b. Education

No GVN-sponsored educational faci-
lities; may be informal instruction
by Vil elders, monks, Catholic priest

E

Some formal instruction, not full-
time, no permanent classrooms.

D

Formal, full-time public primary
education program in permanent
classrooms but overcrowded or at
least 25% of children not enrolled.

C

Virtually all children receive primary
education in permanent classrooms;
may be some adult classes.

B

All children receive primary education
in permanent classrooms; secondary
school accessible; adult education
program.

A

15
5. c. Welfare

No social welfare activity	<u>E</u>
Some welfare activity to assist needy families, but basic needs not determined.	<u>D</u>
Basic needs determined, some being met.	<u>C</u>
Basic needs being met; some special benefits being paid by GVN	<u>B</u>
Basic needs satisfied; special benefits clarified & being paid; Benefit channels continue to function.	<u>A</u>

6. Economic Development

16 a. Self Help Activity

None.	<u>E</u>
People assist in selecting projects but outsiders do most of work.	<u>D</u>
Projects from RD plan chosen with local consent & some participation in those started.	<u>C</u>
All programmed projects underway, chosen to satisfy aspirations; popular participation with outside aid.	<u>B</u>
Some projects completed; local pride general; continuing external interest and support for new projects.	<u>A</u>

17 b. Public Works (require outside expertise; affect at least village)

None planned or undertaken.	<u>E</u>
Some detailed planning for RD plan projects.	<u>D</u>
Planned projects suitable & meet public needs; some work started.	<u>C</u>
Priority projects underway; resources at hand; people appreciative.	<u>B</u>
Projects well along or completed; public enthusiastic.	<u>A</u>

6. c. Economic Improvement Programs (Farming, Fishing, Land Reform, etc.)	None.	<u>E</u>
	Some planning; a few basic programs started.	<u>D</u>
	Basic programs underway; people enthusiastic.	<u>C</u>
	More advanced programs started; increased popular support and participation.	<u>B</u>
	Most programs well advanced in response to popular demand and continuing participation.	<u>A</u>

HAMLET PROBLEMS DURING MONTH

Select the one best answer for each section of each question

1. Incidents by friendly elements adversely affecting relations with hamlet populace.

a. US military.

(1) None or very few ____; (2) Minor only ____; (3) Serious enough to cause active resentment ____; (4) Not applicable ____; (5) Unknown ____.

b. Other FWAMF.

(1) None or very few ____; (2) Minor only ____; (3) Serious enough to cause active resentment ____; (4) Not applicable ____; (5) Unknown ____.

c. ARVN.

(1) None or very few ____; (2) Minor only ____; (3) Serious enough to cause active resentment ____; (4) Not applicable ____; (5) Unknown ____.

d. RF/PF.

(1) None or very few ____; (2) Minor only ____; (3) Serious enough to cause active resentment ____; (4) Not applicable ____; (5) Unknown ____.

e. RD Cadre.

(1) None or very few ____; (2) Minor only ____; (3) Serious enough to cause active resentment ____; (4) Not applicable ____; (5) Unknown ____.

2. Corruption or tyranny of hamlet or village officials.

(1) No indications ____; (2) Rumored ____; (3) Suspected but no proof ____;
(4) Solid indication ____; (5) Unknown ____.

3. Support of RD programs effort by hamlet officials.

(1) Enthusiastic and active ____; (2) Sympathetic but inactive ____;
(3) Indifferent ____; (4) Uncooperative ____; (5) Actively opposed ____.

4. GVN-provided salaries.

a. For RF/PF.

(1) On time ____; (2) In arrears each month ____; (3) In arrears more

than one month ____; (4) Unknown ____; (5) Inapplicable ____.

b. For local staff.

(1) On time ____; (2) In arrears each month ____; (3) In arrears more than one month ____; (4) Unknown ____; (5) Inapplicable ____;

c. For school teachers.

(1) On time ____; (2) In arrears each month ____; (3) In arrears more than one month ____; (4) Unknown ____; (5) Inapplicable ____.

5. Supplies for self-help construction projects.

On time and adequate ____; (2) Delayed but adequate ____; (3) Inadequate and delayed ____; (4) Promised but none received ____; (5) None promised ____.

6. Tax collection (in kind and/or in cash).

(1) GVN only ____; (2) GVN and VC ____; (3) None ____; (4) VC only ____.

7. Condition of main routes from hamlet to village center.

(1) In good repair, adequate for current traffic ____; (2) Being repaired or improved (relocated, new bridge, etc.) ____; (3) Difficult or dangerous to travel because of poor repair ____; (4) Cart track, foot path, or shallow waterway ____; (5) Impassable (flooded, bridge out, stream dried up, etc.) ____.

8. Support of hamlet self-defense force other than PF by district and/or province officials.

- (1) Received funds and/or arms and ammunition as needed ____;
- (2) Have received arms and ammunition but inadequate ____;
- (3) Receives no outside support ____;
- (4) Organization distrusted and disapproved of ____;
- (5) Not applicable ____.

FOUO

CONFIDENTIAL WHEN FILLED IN

APPENDIX C

THIRTY SAMPLE QUESTIONS

The following are some tentative questions to be used in a counter-insurgency allegiance questionnaire. It is to be emphasized that the following questions are given only as examples and in many cases would require additional thought and effort as to type and format.

For the construction of the attitude scale, these questions should be rephrased into short statements. It is felt that little accuracy and reliability would be lost by constructing the scale with statements and testing with questions.

The answers to the following questions that we would wish to hear are obvious to those of us in this country. The trouble is that the answers we want to hear may be obvious to the villagers themselves and we want to stay away from that kind of situation as much as possible. After consulting those familiar with the country and those familiar with the people with which we'll be working, we may find that the statement/endorsement methodology is more effective than the questionnaire approach.

Perhaps it is the simplicity of the questions that is bothersome. It's quite possible that the questions could be couched in terms so that they wouldn't be quite so obvious. Also, a greater percentage of them should probably be written negatively so that a whole raft of affirmative answers would not automatically indicate wholehearted government allegiance.

- A. (1) Would you be willing to serve on the police force of your village?
- (2) Would you accept a position of responsibility in your village if the government requested you to do so?
- (3) Are the VC, in your opinion, trying to unite North and South Vietnam and establish good government?
- B. (1) If you know of a planned VC ambush, would you warn the government forces?
- (2) If you knew that a member of your village were working for the VC, would you report him to the government?
- (3) Would you report the location of a VC mine if you knew where it was?
- (4) Would you be willing to serve on a government intelligence net?
- C. (1) Have there been any pro-government meetings or rallies in your village?
- (2) Would you attend such a meeting or rally?
- (3) If you could have either one, would you rather read a government newspaper or a VC newspaper?
- D. (1) If you had children, would you like to have them attend a school that was built and sponsored by the government?
- (2) Would you willingly help rebuild a school that had been destroyed or damaged by the VC?
- (3) Do you think teachers should teach about and support the government?
- E. (1) Do you believe government supporters and sympathizers are adequately protected from the VC?
- (2) In your opinion, are the government laws fair and just for all?
- (3) If you had a dispute with a neighbor, would you go to the government police and courts for settlement?
- (4) Do you agree with the government policy of severe punishment for those convicted of political, economic, or other crimes against the security of the country?
- F. (1) Who, in your opinion, is responsible for the security and general well-being of your village, the VC or the government?
- (2) If the VC destroyed the effects of a Civic Action team, would you willingly help to rebuild it?

- (3) Are the government teams or forces helping your village build what you think needs to be built?
- G. (1) Do you feel safe whenever you must travel along the roads or waterways?
- (2) Who controls the roads and other transportation means in the area, the government or the VC?
- (3) Are communications between villages adequate for your village's needs?
- H. (1) Would you be willing to work with the VC underground?
- (2) Would you be unhappy if your son joined the government armed forces?
- (3) If you were able to serve in the armed forces, would you rather join the VC or the government forces?
- I. (1) To whom would you sell your rice if both the government and the VC offered to buy it for the same price?
- (2) Would you pay taxes to the VC if they promised not to use force to collect them?
- (3) Do you think it's unfair to have to pay taxes to the government?
- (4) Do you try to hide or find some way to avoid the government tax collector when he comes to your village?

INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Documentation Center Cameron Station Alexandria, Virginia 22314	20
2. Library Naval Postgraduate School Monterey, California 93940	2
3. Professor G. F. Lindsay Department of Operations Analysis Naval Postgraduate School Monterey, California 93940	5
4. Major Raymond L. Simonsen Operations Analysis Section, Headquarters Fleet Marine Force, Pacific FPO, San Francisco 96602	1
5. Chief of Naval Operations (OP 96) Department of the Navy Washington, D. C. 20350	1
6. Analysis Officer Operations Analysis Section, Headquarters, Fleet Marine Force, Pacific FPO, San Francisco 96602	2
7. Commandant of the Marine Corps (Code A03C) Headquarters, U. S. Marine Corps Washington, D. C. 22214	1
8. Director Advance Research Project Agency Research and Development Field Unit APO, San Francisco 96346	1
9. Director, Project AGILE Advance Research Project Agency Washington, D. C. 20301	2
10. LTCOL Richard W. Ansen Headquarters, USMAC-V, J-3 APO San Francisco 96222	1
11. CDR Joseph Metcalf III Research & Analysis Division Advance Research Project Agency Research and Development Field Unit APO San Francisco 96346	1

INITIAL DISTRIBUTION LIST (cont.)

	No. copies
12. Professor Boyd Huff	1
Department of Government and Humanities	
Naval Postgraduate School	
Monterey, California 93940	

Security Classification

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)

NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA, 93940

2a. REPORT SECURITY CLASSIFICATION

UNCLASSIFIED

2b. GROUP

3. REPORT TITLE

A PROPOSED MEASURE OF EFFECTIVENESS FOR COUNTERINSURGENCY OPERATIONS

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

MASTERS THESIS

5. AUTHOR(S) (Last name, first name, initial)

SIMONSEN, RAYMOND L.

6. REPORT DATE

JUNE 1967

7a. TOTAL NO. OF PAGES

87

7b. NO. OF REFS

15

8a. CONTRACT OR GRANT NO.

b. PROJECT NO.

c.

d.

9a. ORIGINATOR'S REPORT NUMBER(S)

9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)

10. AVAILABILITY/LIMITATION NOTICES

~~This document is subject to special report controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of the Naval Postgraduate School, Monterey, California.~~

11. SUPPLEMENTARY NOTES

12. SPONSORING MILITARY ACTIVITY

NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA, 93940

13. ABSTRACT

This thesis outlines the steps an insurgency normally takes and describes the present strategy used to combat the insurgency in South Vietnam as well as the measures of effectiveness currently being used in that country. The need for a measure of effectiveness relating directly to the people of the country engaged in counterinsurgency operations is established and methodology for an allegiance measure, based on current, well-documented psychological testing techniques is proposed.

14.

KEY WORDS

LINK A

LINK B

LINK C

ROLE

WT

ROLE

WT

ROLE

WT

Counterinsurgency Operations

Measures of Effectiveness

Psychological Testing Methods

DUDLEY KNOX LIBRARY



3 2768 00415844 4